Working Wives and Expenditure on Services

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The major focus of this research is the relationship between a wife's employment and expenditure on time-saving services. Multiple regression analysis of data from the 1972–1973 Consumer Expenditure Survey indicates that two measures of the extent of a wife's participation in the labor force were influential in determining monetary outlay on services that are expected to be sensitive to the value of time. Other factors—such as family income, education, and stage of the family life cycle—also exert an impact on expenditure. Findings indicate that family expenditure on services is a complex process influenced by many factors besides a wife's employment.

The dramatic rise in married women's labor force participation has increased the number of husband–wife families in which both spouses are wage earners. In 1980, there were approximately 25.6 million such families—25 percent more than in 1970 (Hayghe 1982).

Because time is a fixed resource, two-earner families have fewer hours available for nonmarket activities than do comparable one-earner families. This is born out by previous studies (Gauger and Walker 1980; Nickols and Metzen 1978; Vanek 1974), which have shown that working wives spend fewer hours per week in housework and other forms of household production than do full-time homemakers.[1] Time spent on housework by other family members has not been found to vary significantly with employment status of the wife, however. Thus many employed wives may find it necessary to purchase time-saving goods and services in order to successfully combine dual productive roles.

The purpose of this research is to examine the relationship between wife's employment and a variety of services for which demand is expected to be potentially sensitive to the value (or scarcity) of time within the household. Since over half of all husband–wife families now have a working wife, research that clarifies the relationship between the wife's employment and family consumption expenditures is needed. The present study examines the impact of wife's labor-force involvement on five categories of service expenditure.

REVIEW OF RELATED RESEARCH

Earlier literature on dual-earner families often emphasized the propensity of such families to purchase consumer durables. The rationale for this emphasis was associated with the traditional view of married women as secondary workers whose main commitment was to the home. Women's participation in the labor force was viewed as intermittent (Mincer 1960). Wives would therefore seek paid employment only when a fairly expensive durable, such as a washing machine, was needed by their families or when funds were needed to reach family goals, such as providing for children's education. Income derived from wives' work was considered transitory and thus likely to be saved in accordance with Friedman's permanent income hypothesis (1957). Because Friedman's hypothesis defined outlay on durables as saving, the supposed propensity of working-wife families to purchase consumer durables was seen as consistent with his theory.

An alternative rationale based on Becker's theory of the allocation of time (1965) has become prominent in recent years. According to Becker's theory, wives who participate in the paid labor force will place a higher marginal value on time available for household work than will nonworking wives. Other factors being equal, families of working wives will be inclined to use less time and more purchased goods in household production than

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[1] It is recognized that full-time homemakers perform valuable unpaid work in the household. Nevertheless, the term "working wife" here refers to a wife who is employed for pay on either a full-time or part-time basis.

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will families in which the wife does not work outside the home.

Although this rationale also suggests that working wives might substitute time-saving services for their own time, researchers employing this rationale have usually focused on expenditure on time-saving durables. But recent studies have yielded inconsistent findings regarding differences in durable-goods expenditure by working-wife and nonworking-wife families. Strober (1977) found no relationship between a wife's employment and net outlay on durables once the effects of income and other factors were taken into account. Expenditure on time-saving durables was also examined by Foster, Abdel-Ghany, and Ferguson (1981) and by Strober and Weinberg (1977). Neither study uncovered a relationship between wife's employment and expenditure on any of the time-saving durables examined once the effect of other factors was controlled.

Reilly (1982) examined role overload as a possible explanation for the absence of a relationship between wife's employment and durable-goods consumption. Although wife's employment status was not related to ownership of time-saving durables, working wives who reported role overload were more likely to own time-saving durables. Schaninger and Allen (1981) investigated the influence of a wife's occupational status on family consumption patterns. Even after taking income into account, families of both high-occupational-status and low-occupational-status working wives were more likely to own major durables than were families of nonworking wives.

Research focusing on whether working-wife families economize on time by purchasing services is virtually nonexistent. Previous studies employing data from the 1972–1973 Consumer Expenditure Survey (CES) have uncovered some differences in outlay on time-saving services by working-wife and nonworking-wife families. Waldman and Jacobs (1978) found that two-earner families spent significantly more than one-earner families on food away from home and on domestic and household services. Yet when the sample was classified by income, no significant difference remained for expenditure on food away from home, and the findings for domestic and household services varied from consistently significant to mixed. Since the researchers did not control for factors other than income, interpretation of these descriptive statistics is considerably limited.

Vickery (1979) used CES data from the 1972 survey year to examine the expenditure patterns of married-couple families in which the husband was between age 25 and 64 and in which family income was between $2,000 and $34,999. Wife's employment status was based on three classifications:

1. *Not employed*
2. *Full-time work*—35 or more hours a week for at least 32 weeks during the year, with earnings of at least $400
3. *Part-time work*—not full-time work, but at least 13 weeks of employment and at least $400 in earnings.

Controlling for the effects of income and other factors (asset holdings and family demographic characteristics), families with wives employed full time spent significantly more money on personal care; no relationship between personal care expenditures and wife's employment status was uncovered among families of wives employed part time. Vickery found, however, that families of wives employed either full time or part time spent significantly more money both on domestic services and materials used in housekeeping and on dry cleaning, laundry, and clothing repair than did families in which the wife was not employed (Strober 1979).[2]

Although the Waldman and Jacobs and the Vickery studies provided insights into the relationship between labor force participation of women and consumption of time-saving services, the results are not entirely conclusive. The Waldman and Jacobs study did not control for variables that may affect the value of household time beyond the influence of a wife's labor force status and income. The Vickery study, as reported by Strober, controlled for a larger number of independent variables, but it too excluded certain variables that may significantly affect patterns of expenditure. Primary among these variables are race and education. The theoretical rationale for their inclusion is provided in the following section. Moreover, the Vickery study does not examine child care costs or payment for food away from home, two categories of expenditure that make it possible to economize on the wife's time. And Vickery's inclusion of materials used in housekeeping in the same category as expenditure on domestic services complicates interpretation of the results for the service component of this category. By applying a more inclusive list of independent variables to five categories of service expenditure, the present study attempts to provide more conclusive information about the determinants of expenditure on time-saving services.

RATIONALE

The primary rationale underlying this study is the theory of the allocation of time (Becker and Michael 1973). According to this approach, consumers derive utility from "commodities" (e.g., a prepared meal) that are produced by combining time with purchased goods or services (e.g., groceries).

Even though all consumers face roughly the same prices for market goods and services, the value they assign to time differs substantially. All else being equal, consumers for whom time is relatively more valuable should tend to use a less time-intensive (more goods- or service-intensive) process to achieve a given level of utility. Each of the five individual services examined in this study can be provided by means of varying combinations of time

[2] The Vickery study does not report regression coefficients. Strober (1979) presents and discusses these coefficients, which she privately obtained from Vickery.

and monetary outlay. Given the more restrictive time constraints of working-wife families, this theory suggests that a wife's labor force participation should be positively associated with expenditure on time-saving services. Whether this is true is of major interest in this study. Other variables are also expected to affect the value or scarcity of household time. Family size—particularly the presence of young children—is expected to influence the tendency of households to purchase time-saving services. Homeownership may also affect service expenditure, but the direction of the effect is uncertain and depends on whether homeownership is a complement to or a substitute for the purchase of time-saving services.

Standard demand theory (Friedman 1976) posits a positive relationship between income and the purchase of goods and services, except in the unusual case of an inferior good. However, James Duesenberry's (1967) relative income hypothesis suggests that at any given income level, blacks are expected to save more and spend less than whites. The empirical results reported by Duesenberry provide support for this hypothesis. To date, no evidence has been gathered on whether the relative income hypothesis is applicable specifically to time-saving services, but its potential importance suggests the inclusion of race in any study of consumption behavior.

The relationship between wife's education and family consumption expenditure has been found to be significant but complex (Abdel-Ghany and Foster 1982; Hafstrom and Dunsing 1972). The basic theoretical argument is by Michael (1972), whose neutrality model assumes that education increases efficiency in all nonmarket activities and that the influence of education is neutral (has the same effect on each activity). This greater efficiency increases the household's "real" income at any given level of monetary income, thus increasing the household's ability to purchase goods and services. Thus educational achievement is in general expected to increase expenditure levels on the types of service expenditures examined in this study. However, since goods and services vary substantially in their income elasticities of demand, the composition of consumption expenditures may be significantly altered.

The usual practice of including age as an independent variable in expenditure studies is also followed in this paper, in order to detect potential life-cycle effects.

METHODOLOGY

The data base for this research was the interview component of the 1972–1973 Consumer Expenditure Survey.[3] The specific data analyzed were from the 1973 survey year. The study sample included husband-wife families in which both the husband and the wife were less than 65 years old and in which the husband was employed full time (35 hours or more per week) for at least 48 weeks during the survey year. Families not reporting wife's education, family income, and homeownership status were excluded. These adjustments resulted in a study sample of 3,732 families.

Multiple regression analysis was used to examine the influence of the wife's employment and other factors on mean dollar expenditure on five individual services. The specific services examined were:

1. *Food away from home*—meals purchased in restaurants, cafeterias, and schools
2. *Child care*—outlays on babysitters and child care centers
3. *Domestic services*—cleaning, laundering, cooking, and other domestic services
4. *Clothing care*—drycleaning and laundry sent out, and clothing repair and alterations
5. *Personal care*—barbershop and beauty parlor services.

Although mean outlay on total services was $827.56, the average for each category varied widely: average expenditure for food away from home was $522.37; for domestic services, it was $51.68; and average outlays on child care, clothing care, and personal care were $61.21, $70.77, and $121.53 respectively.

Table 1 provides a detailed description of the independent variables of interest in this study—i.e., family income; weeks worked by the wife (during the survey year); wife's hours worked per week (full-time homemaker, full-time employment, or part-time employment); family size (excluding number of children under six years old); number of children under six years old; wife's education; wife's age; race (black or nonblack);[4] the interaction between race and income; and homeownership. Family income, weeks worked, family size and number of children under six were continuous variables. The remaining independent variables were measured as dummy variables. In addition, a number of variables were employed to control for differences in consumption patterns among regions, between urban and rural dwellers, and across urban areas of differing sizes. For brevity, these variables are omitted from the tables and the following discussion.

Weeks worked and hours worked per week together measure the impact of the wife's commitment of time to the labor market. Both variables are expected to be positively related to service expenditure, particularly for child care. A single variable of hours worked per year (the product of weeks worked and hours worked per week) would have been preferable as a measure of labor market involvement had both variables been continuous measures. As Table 1 indicates, however, hours worked per week can be utilized only in categorical form and thus

[3] For a discussion of the 1972–1973 CES methodology, see Carlson (1974).

[4] The race of the husband was used, as this is the only household member for whom racial information is reported in the Consumer Expenditure Survey.

TABLE 1

INDEPENDENT VARIABLES IN MULTIPLE REGRESSION MODELS

Variable	Definition	Mean or percentage
Family income	Total of after-tax income from all sources during the survey year	$\bar{X}$ = $15,483
Weeks worked	The number of weeks worked by the wife during the survey year	$\bar{X}$ = 21.9
Hours per week	The number of hours per week usually worked by the wife during the survey year	
Full-time homemaker (reference group)	No hours of market work reported	44.3%
Full-time employment	Wife usually employed 35 or more hours per week	38.1%
Part-time employment	Wife usually employed less than 35 hours per week	17.6%
Family size	Number of persons residing in the household during the survey year minus the number of children under six years old	$\bar{X}$ = 3.4
Young children	Number of children under six years old	$\bar{X}$ = 0.5
Education	Wife's educational attainment	
Edwife 1 (reference group)	Some grade school completed	8.3%
Edwife 2	Some high school completed	18.1%
Edwife 3	High school graduate	47.5%
Edwife 4	Some college completed	14.0%
Edwife 5	College graduate; includes those who have done graduate work	12.1%
Age	Reflection of life cycle stage; based on wife's age	
Age 1 (reference group)	Less than 25 years old	5.8%
Age 2	25–34 years old	27.7%
Age 3	35–44 years old	24.8%
Age 4	45–54 years old	24.9%
Age 5	55–64 years old	16.8%
Race	Husband's race	
Nonblack (reference group)		93.6%
Black		6.4%
Race*income	Interaction term; race multiplied by family income	$\bar{X}$ = $990.91
Homeownership		
Renters (reference group)	Family rents its residence	27.5%
Homeowners	Family owns its residence	72.5%

information might be lost if it were combined with the number of weeks worked to form a single variable.

Since young children tend to be relatively time-intensive while older children are more money-intensive, their influence is separated into two variables: young children (under six years old), and family size (which excludes children under six). The effect of both measures on expenditures is predicted to be positive for child care and undetermined for the other categories. On the one hand, the presence of children consumes some of the time of adult household members, possibly increasing the demand for services that substitute for time. On the other hand, the presence of additional family members requires additional outlay on necessities and thus reduces discretionary income available for the purchase of time-saving services.

Race was included as a variable to determine whether Duesenberry's relative income hypothesis holds for the particular services investigated in this study. Because mean income is substantially lower for blacks ($13,852) than for nonblacks ($15,595) in the sample, it is possible that the race variable will capture some of the effect of income on expenditure. A more accurate test of the relative income hypothesis would minimize this possibility by also employing a variable that gauges the interaction of race and family income. For this reason, the race*income interaction variable was included. The combined effect of the race and race*income variables is hypothesized to be negatively related to each of the time-related expenditure categories.

FINDINGS

The findings of the multiple regression analysis of the factors influencing family expenditure on services are presented in Table 2.

Income and Race

As anticipated, family income had a pervasive positive influence on all dependent variables. It should be noted

TABLE 2

SERVICE EXPENDITURE REGRESSIONS (T-RATIOS IN PARENTHESES)

Independent variable	Dependent variable: Food away from home	Child care	Domestic services	Clothing care	Personal care	Total services
Intercept	36.20	−50.02	−81.21	20.67	−20.52	−98.47
Family income	.0173 (19.37)[a]	.0013 (3.59)[b]	.0089 (20.15)[a]	.0031 (15.35)[a]	.0036 (14.92)[a]	.0343 (26.61)[a]
Weeks worked	11.56 (2.89)[b]	12.34 (4.96)[a]	−0.52 (−1.74)	−0.84 (−0.60)	2.22 (1.34)	19.99 (2.27)[c]
Hours per week: Part-time employment	−44.95 (−1.60)	−3.68 (−0.32)	10.39 (0.75)	−12.76 (−1.99)[c]	−9.18 (−1.21)	−60.18 (−1.47)
Full-time employment	53.91 (2.50)[c]	40.30 (3.23)[b]	11.74 (0.77)	2.01 (0.29)	8.17 (0.99)	116.15 (2.63)[b]
Family size (excludes number of children under 6 years old)	.4320 (0.81)	−1.00 (−0.46)	−.95 (−2.59)[c]	−2.66 (−2.18)[c]	−2.34 (−1.62)	−1.12 (−1.45)
Young children (under 6 years old)	−31.52 (−2.57)[c]	77.64 (15.62)[a]	24.73 (4.09)[a]	−2.96 (−1.06)	−9.52 (−2.88)[b]	58.36 (3.31)[b]
Education: Edwife 2 (some high school)	131.04 (4.25)[a]	2.76 (0.22)	−10.34 (−0.67)	20.06 (2.85)[b]	10.35 (1.24)	153.88 (3.46)[b]
Edwife 3 (high school graduate)	158.45 (5.59)[a]	−0.32 (−0.03)	−2.32 (−0.17)	18.72 (2.89)[b]	20.74 (2.71)[b]	195.26 (4.78)[a]
Edwife 4 (some college)	137.46 (4.14)[a]	23.64 (1.75)	19.22 (1.17)	41.89 (5.52)[a]	25.50 (2.85)[b]	247.70 (5.18)[a]
Edwife 5 (college graduate)	162.14 (4.93)[a]	21.27 (1.50)	62.20 (3.61)[b]	39.72 (4.99)[a]	17.59 (1.87)	312.92 (6.23)[a]
Age: Age 2 (25–34)	52.15 (1.51)	33.76 (2.42)[c]	−16.23 (−0.95)	10.10 (1.29)	25.53 (2.75)[b]	105.30 (2.12)[c]
Age 3 (35–44)	124.09 (3.29)[b]	8.45 (0.55)	21.36 (1.15)	15.48 (1.80)	74.66 (7.34)[a]	244.04 (4.49)[a]
Age 4 (45–54)	57.13 (1.49)	−24.17 (−1.56)	25.94 (1.37)	21.60 (2.48)[c]	86.09 (8.35)[a]	166.59 (3.03)[b]
Age 5 (55–64)	0.70 (0.02)	−24.62 (−1.55)	39.06 (2.01)[c]	30.79 (3.44)[b]	95.60 (9.03)[a]	141.53 (2.50)[c]
Race: Black	45.00 (1.22)	1.53 (0.10)	109.77 (6.02)[a]	87.62 (10.41)[a]	28.72 (2.89)[b]	272.64 (5.13)[a]
Race*income	−0.02 (−12.06)[a]	−0.001 (−2.40)[c]	−.009 (−12.92)[a]	−.002 (−6.74)[a]	−.003 (−7.87)[a]	−.032 (−16.02)[a]
Homeownership: Homeowners	57.20 (3.12)[b]	19.34 (2.60)[b]	12.60 (1.39)	−14.07 (−3.37)[a]	19.61 (3.97)[a]	94.68 (3.59)[a]
F	37.00	30.02	27.05	25.62	36.51	57.65
R^2 (percent)	19.33[a]	16.27[a]	14.90[a]	14.23[a]	19.12[a]	27.18[a]

[a] Significant at $p < 0.0001$.
[b] Significant at $p < 0.01$.
[c] Significant at $p < 0.05$.

that the coefficients of the family income variable by themselves apply only to nonblack families. To obtain the comparable coefficient for households defined as black (footnote 4), it is necessary to add the coefficient of the race*income variable. All of these interaction terms are negative and statistically significant, indicating that the marginal impact of income on expenditure is less for blacks than for nonblacks for all dependent variables.

Interpreting the overall effect of race on service expenditure is complicated by measuring the effect with two variables (race and race*income). The influence of race is easily interpreted for child care expenditure and

payment for food away from home because for both categories, only the interaction term is significant and negative, leading to the unambiguous conclusion that race has a negative effect on child care expenditure. For the remaining subcategories and for total services, race and race*income take on opposite signs; hence, the sign of the overall effect of race depends on income level.

One way to interpret these results is to calculate the combined effect of race (i.e., in this study, being in a family in which the husband is black) at the sample mean income for blacks. When this effect is calculated, other factors being equal, blacks are found to spend $142 less than nonblacks on total services, $15 less on domestic services, and $13 less on personal care. However, blacks spend $60 more on clothing care than do nonblacks. Findings indicate that race generally has a negative impact on service expenditures, at least in the area around mean income. When the equations were re-estimated without the interaction term, the effect of race was again positive for clothing care and negative for the remaining subcategories and for total services.[5] Moreover, households in which the husband was black spent $183 less, on average, than did otherwise comparable households with husbands who were nonblacks. The results thus provide strong support for Duesenberry's relative income hypothesis.

Labor Force Participation

The major variables of interest in this study—weeks worked and hours worked per week—measure the extent of a wife's participation in the paid labor force. The differential impact of these variables indicates that the relationship between a wife's employment and her family's expenditure on services is much more complex than first anticipated. As expected, weeks worked was positively associated with expenditure on food away from home, child care, and total services, but no relationship was found between weeks worked and monetary outlays on domestic services, clothing care, and personal care.

With the exception of clothing care, there was no difference in expenditure between families of wives employed part time and families of full-time homemakers, once the effect of weeks worked and other factors were taken into account. However, families of wives employed full time spent significantly more money on food away from home, child care, and total services than did families of full-time homemakers. These findings indicate that, although working-wife families' expenditures on food away from home, child care, and total services will vary directly with the number of weeks worked, families of part-time working wives are able to reduce expenditures on these services. It is uncertain, however, whether reduced monetary outlay is the result of lower nondiscretionary job-related expenditures or the result of more hours available for household production.

The fact that neither weeks worked nor hours worked per week had any impact on spending for domestic services is worthy of note. These findings indicate that working-wife families do not substitute paid services for housework that would normally be done by the wife if she were not employed outside of the home. It is unclear whether working wives in the study sample reduced leisure time in order to do housework, decreased the amount of housework done, or used the services of other family members.

It should be mentioned that the impact of a wife's participation in the paid labor force differed from the impact found by Waldman and Jacobs and by Vickery. Assessment of these differences is difficult because each study differed in the specification of dependent and independent variables, and the present study controlled for factors that were not accounted for in the previous studies. This specification difference may account for Vickery's finding that families of wives employed either full time or part time spent more money on domestic services and clothing care than did families of full-time homemakers. Vickery did not control for factors such as race, wife's age, and wife's education, which were found to influence expenditure significantly in the present study.

To examine this possible explanation for the differing findings among studies, the equations for clothing care and domestic services were re-estimated excluding race, wife's age, and education. In both cases, R^2 was reduced by more than half, but the coefficients for the labor force participation variables were significant. These results suggest that studies that do not control for education, age, and race may be attributing explanatory power to labor force status itself that ought properly to be attributed to variables which influence labor force status.

Family Size

Family size, excluding preschool children, was much less influential in explaining expenditure than was the number of children under six years old. As might be expected, families with at least one child under six spent more on child care than those without children under six. Greater monetary outlays on domestic services relative to the reference group indicate that among families with children under six, substitution of the paid services of others was a strategy used to compensate for reduced household production time because of the requirements of caring for young children. The negative coefficients for food away from home and personal care suggest that families with children under six chose to reduce monetary outlays in these areas in order to allocate income to child care and domestic services.

Education

No relationship between education and expenditure on child care was uncovered. Families of women at the

[5] For economy of space, these regressions are not presented in this paper, but are available from the authors upon request from interested readers.

highest level of education were found to spend more on domestic services in comparison to families in which wives had no more than a grade school education. No difference in expenditure was found for families of women at other levels of education. For the remaining variables, expenditure differentials tended to become larger as the level of education increased. This pattern provides partial support for Michael's neutrality model. An alternative explanation for these results would be that more highly educated women have a lower preference for housework, but not for child care.

Age

The impact of the dummy variable set representing age indicates the presence of distinct life-cycle effects on expenditure. All age categories were positively associated with monetary outlays on total services and on personal care. For total services, the positive influence of age peaked with the 35–44 age group, but for personal care each successive age category was associated with a higher level of expenditure.

Results for the remaining expenditure categories were mixed. Only families in which the wife was age 35–44 spent significantly more than the reference group (in which the wife was under 25) on food away from home; only families in which the wife was age 25–34 spent significantly more on child care relative to the reference group. Age was positively associated with expenditure on domestic services for the 55–64 age category only, but for clothing care, age was positively associated with expenditure among families in which the wife was 45–54 or 55–64 years old.

Homeownership

A significant positive relationship between homeownership and total service expenditure was found, suggesting that homeownership and the purchase of time-saving services are complementary. Complementarity was also supported for child care, food away from home, and personal care. Although one might expect homeownership to be particularly complementary to the purchase of domestic services, it is the one subcategory for which no significant effect was found. One possible explanation is that the decision to own a home carries with it a willingness to assume the larger commitment of time necessitated by homeownership.

For clothing care, the effect of homeownership was significantly negative. This result probably reflects the fact that homeownership is likely to be correlated with the ownership of washing machines and dryers. If so, the amount of time saved by the purchase of clothing care may not be as great for homeowners as it is for renters.

All R^2 values were statistically significant. Although these values are generally low, they are consistent with most cross-sectional studies employing microdata.

SUMMARY AND CONCLUSIONS

With the exception of domestic services and personal care, expenditure levels were found to differ between working-wife and nonworking-wife families, but our results indicate that it is more than just the employment or nonemployment of the wife that accounts for these differences. For example, the number of weeks worked by the wife was positively associated with expenditure on food away from home, child care, and total services. When the effects of weeks worked and other factors were taken into account, there was no difference in expenditure on the three categories between families of part-time working wives and families of full-time homemakers, although families of full-time working wives were found to spend more on these items relative to families of full-time homemakers.

Expenditure on services was influenced by other factors not associated with a wife's employment. As expected, family income had a pervasive positive influence on expenditure. Results for the effects of education provide support for Michael's efficiency in consumption hypothesis, and the results for race provide at least moderate support for racial differences in consumption derived from Duesenberry's relative income hypothesis.

An important qualification concerns the precision of the dependent variables used in this study. While all of the dependent variables are intended to represent services for which demand would be positively affected by the value of time, such classification is not always clearcut. For example, meals away from home generally use less time but cost more money than meals prepared at home, but this is not always the case. A meal at an elegant restaurant that consumes an entire evening is an entertainment expense that consumes more money and perhaps more time than a meal prepared at home.

This problem is likely to be minor except in the case of personal care. Although beauty parlor services may be more convenient than equivalent home beauty care (e.g., home permanents), it is not clear whether less time is consumed. A wife who gives her husband a haircut will clearly save money, but she may also save time, if time available both to her and to her spouse are considered together. Moreover, tastes for extensive beauty care (whether provided at home or through the purchase of beauty parlor services) probably vary considerably. One way to save time—other than substituting beauty parlor services for equivalent home beauty care—is to adopt a hairstyle that requires little care. For these reasons, inclusion of the personal care category is highly tentative and should be interpreted accordingly.

It should also be mentioned that because the highest R^2 of any regression in Table 2 is 27 percent, most of the variation in expenditure on services remains unexplained. Given the growing importance of working wives

in the U.S. economy, this finding should provide a substantial impetus for further research on this topic.

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